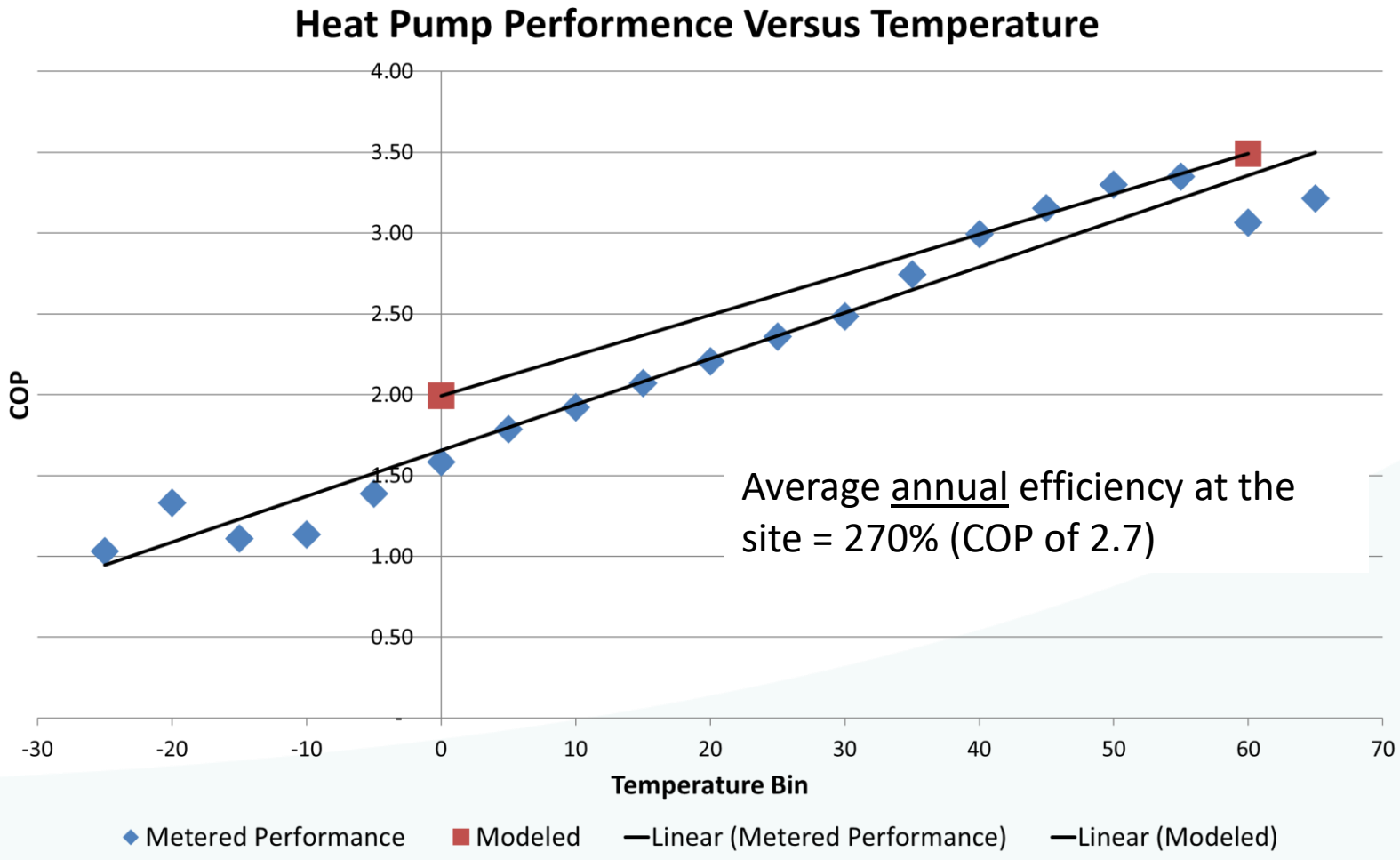
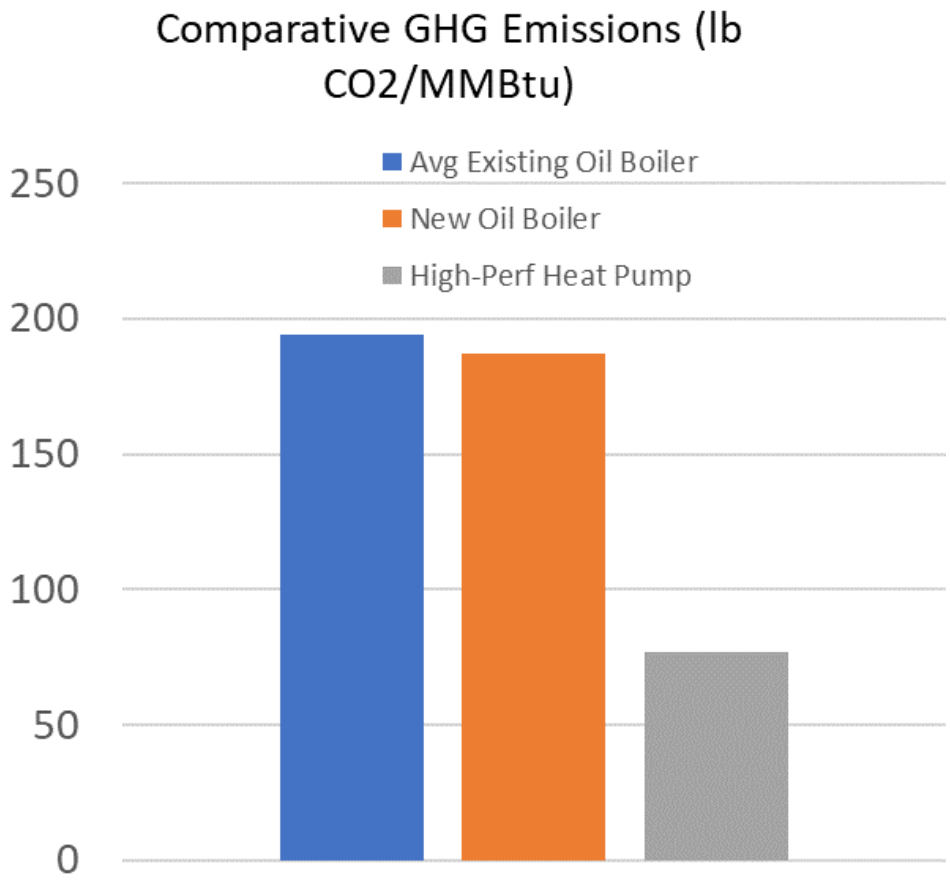
Heat Pump Evaluated Performance

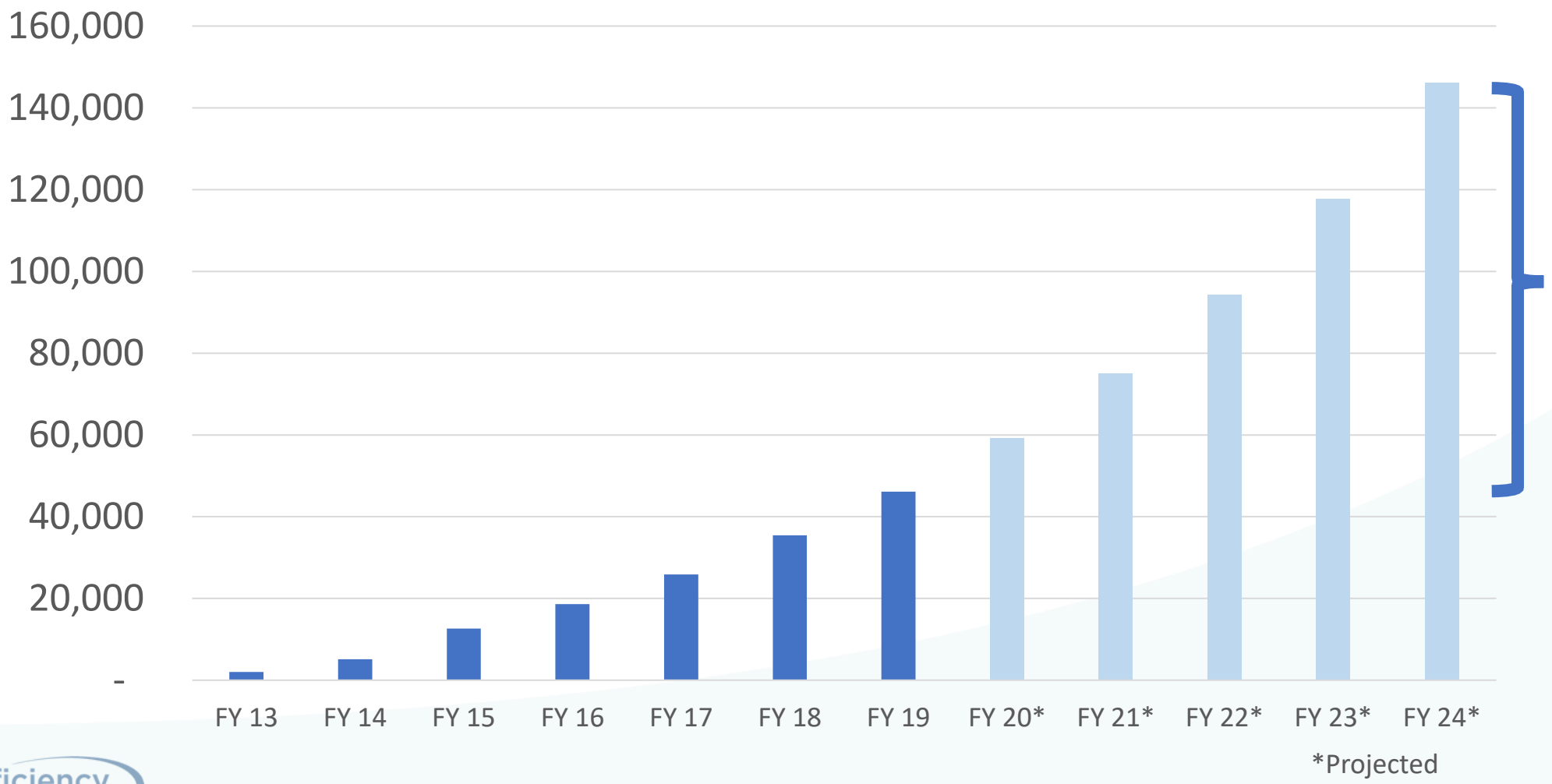


Metrics Related to Heat Pumps (HP)



- A single, high-performance HP displaces 27.5 MMBtu/year in a typical Maine home
  - HP emissions rate: 77 lb CO2/MMBtu (assuming today's generation mix serving the NE grid)
  - Existing oil boiler rate: 194 lb CO2/MMBtu (153% more emissions compared to HP)
  - New high-eff oil boiler rate: 187 lb CO2 /MMBtu (143% more emissions compared to HP)
- Single HP saves 117 lb CO2/yr compared to an existing boiler; 110 lb CO2/yr compared to a new boiler
- Illustration –
  - If, hypothetically, you installed 1 HP in every home in Maine to supplement existing heating systems, it would
    - Displace about 1/3 of the current GHG from distillate fuel use in Residential sector
    - Achieve 720,000-760,000 metric tonnes CO2/year reduction (0.72-0.76 MMTCO2)

Cumulative EMT-funded Heat Pump Installations



Goal to add 100,000 new Heat Pumps enacted through Governor's Bill LD 1766, 6/14/2019

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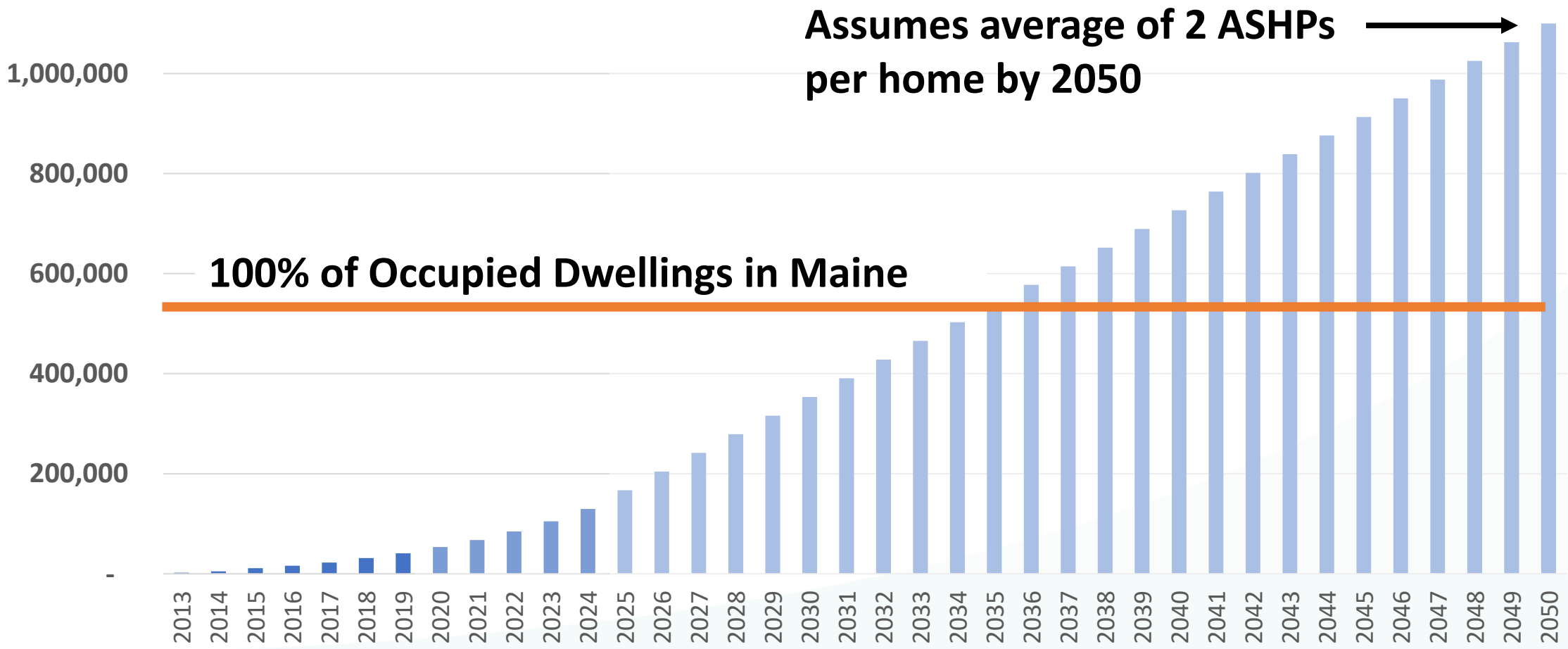
Maine's Electrification of Space Heating – Part Way to CO_2 Goals



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